

Texas Natural Resource Conservation Commission, Recycling Market Development Program

Market Prices in Review, 1996

Each month *Market News* reports price ranges for both processors and end-markets. The price graphs shown on this page contain the highest price for the month the prices were obtained. The high number was chosen since it is the most volatile from month to month and gives the best indication of the direction of the market.

In 1996, market prices for most recycled materials were more stable than the drastic ups and downs of 1995. Industry experts believe 1996 prices were a more accurate reflection of historical recycling market prices.

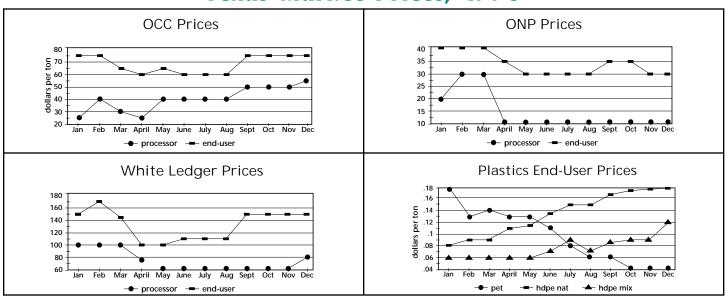
Both processor and end-market prices for paper went down during 1996. Large inventories at mills and weak export markets were the main reasons for soft paper prices. The high range OCC processor price saw a \$30 increase starting at \$25/ton in January and ending at \$55/ton in December 1996. The end-user price stayed relatively stable at \$60-\$70/ton throughout 1996. ONP prices have continued to lag. End-user price for ONP went from \$45/ton in January to \$30/ton in December. The processor price for ONP also went down from \$20/ton at the beginning of the year to \$5-\$10/ton at the end. High quality grades such as white ledger experienced a \$25 drop in 1996. End-user prices in January started at \$250/ton and ended at \$225/ton. Processor prices also went from a high of \$195/ton to a low of \$125/ton in December. In 1997, orders from export markets are expected to return and strengthen the markets. Most industry analysts expect paper markets to remain relatively stable throughout 1997.

Post-consumer plastic prices experienced unique ups and downs during 1996. PET started the year at \$0.18/lb, and ended at about \$0.04/lb. This drastic downward spiral in the PET market was due to a worldwide oversupply of cheap virgin PET. HDPE has enjoyed a high run- up for both natural and mixed-colors. Natural HDPE started the year at \$0.08/lb, and finished the year at \$0.19/lb. HDPE mixed also experienced an upward move, starting the year at \$0.06/lb and ending at \$0.12/lb in December 1996. A shortage of virgin polyethylene drove HDPE price up.

Aluminum, glass, and steel can prices were relatively stable throughout 1996. Aluminum end-user prices vacillated from \$0.50 to \$0.60/lb; processor prices fluctuated from \$0.45 to \$0.35/lb. Glass end-user markets were steady at \$59, \$57 and \$15/ton for brown, clear, and green respectively; processor prices saw a \$5 drop mid-year. Prices fell from \$30, \$25, \$10/ton for clear, brown, green to \$25, \$20 and \$5/ton, respectively. Steel can end-user markets had a margin of \$100 to \$80/ton throughout 1996. Processor prices fluctuated from \$30 to \$40/ton. Experts expect aluminum, glass, and steel can markets to remain stable in 1997.

The only constant variable in recycling markets is change. If you are thinking of starting a recycling business in 1997, be conservative when writing your business plan. Estimate low prices for commodities and you will be in good shape when markets improve.

Texas Market Prices, 1996



Scrap Tire Recycling

Texans throw away about 18 million scrap tires each year, or the equivalent of 50,000 tires a day. Scrap tires are collected by a waste tire transporter, delivered to a tire processor, then finally taken to an end-user. The leading uses of scrap tires are as media for leachate collection systems in landfills, and tire derived fuel (TDF). The goal of the Waste Tire Recycling Program (WTRP) is to ensure the collection and recycling of scrap tires. The program is funded through a fee collected when new tires are purchased.

The complex structure of a tire involves the use of virgin rubber and petroleum products that have been chemically changed into a whole new material. Unlike aluminum cans that can be recycled into the same material, scrap tires are not suitable for making new tires. However, new equipment is capable of separating the rubber and steel from the tire. This process has influenced the emergence of new markets, such as rubber composites used for stock trailer flooring, lumber substitutes, soaker hoses, mulch, running tracks, equestrian tracks and stables, roofing products, and rubberized asphalt; in addition the steel in scrap tires is also recyclable. TNRCC has allocated \$2 million in grant money for waste tire recyclers. These funds are intended to help attract new markets for scrap tires to the state. Grant packages (Requests For Proposals) must be completed and returned by January 31, 1997.

Earlier this year, TNRCC awarded three types of Waste Tire Recycling Fund grants to 12 facilities for the following activities:

- Construction of facilities that recycle used/scrap tires (six awards)
- Retrofitting of energy recovery facilities to use whole used/ scrap tires as fuel (three awards)
- Retrofitting of energy recovery facilities to use tire shreds as fuel (three awards)

Current scrap tire utilization for all of the facilities awarded grant funding is approximately 7.7 million pounds per month (about 413,900 tires per month). Therefore, facilities awarded grants from the Waste Tire Recycling Fund recycled 28 percent of the scrap tires generated in the state in October of 1996. This contribution increases each month as energy recovery facilities progress toward completion of retrofit projects.

Facilities that use tires as fuel (TDF) are constantly tested and monitored, just as every industrial facility in the state is required to meet air quality standards. Under the condition of very high heat, for example,

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(for the week of December 16, 1996)

Material		Processor Price	End-User Price
Aluminum	UBC (cans)	\$0.22 - 0.38/lb —	\$0.56 - 0.60/lb ↑
Glass	Flint	0 - 20/ton –	50 - 57/ton –
	Amber	0 - 15/ton –	40 - 59/ton –
	Green	0/ton –	15/ton –
Paper	OCC (cardboard)	10 - 55/ton ♠	60 - 75/ton –
	ONP (newspaper)	0 - 10/ton -	10 - 30/ton -
	White Ledger	30 - 80/ton ♠	100 - 150/ton –
	Mixed Paper	0 - 10/ton -	10 - 15/ton –
	Mixed Office Ledger	10 - 35/ton -	40 - 75/ton ↓
	Computer Print-out	60 - 150/ton ♠	200 - 220/ton -
Plastic	PET (mixed colors)	0 -	0.01 - 0.04/lb -
	HDPE (natural)	0 -	0.18 - 0.19/lb ↑
	HDPE (mixed colors)	0 -	0.06 - 0.12/lb ↑
Steel	Steel Cans	0-30/ton -	78/ton ★

The prices listed above are compiled by the TNRCC Recycling Market Development Program and are for reference only. These prices are not firm quotes. TNRCC obtained pricing information from buyers within each category and developed a pricing range. "Processors" include dealers, brokers, scrap yards and collection centers, whereas, "end-users" include mills and plants. Processor prices are for delivered material in metropolitan areas of the state and do not reflect the value of any collection services. End-user prices, except for glass, are for baled material in truckload quantity, f.o.b. seller's dock. The difference between processor and end-user prices is indicative of the value added by separating, baling or otherwise preparing materials to meet end-market specifications. Actual prices paid by end-users will depend on quality, quantity and transportation requirements. Arrows indicate direction of change from previous month.

inside a cement kiln where temperatures average 2400-2900 degrees Fahrenheit, the combustion of the fuel is complete. Under controlled operating conditions, scrap tires can burn cleaner than coal or lignite.

While TNRCC encourages the use of scrap tires in products and for engineering applications until the demand for scrap tire rubber approaches something closer to the supply, using them as fuel remains the most cost-effective way to recycle tires. For more information, contact the Waste Tire Recycling Program at 512/239-6001 or check the internet at http://www.tnrcc.state.tx.us/enforcement/tires.

Market News is produced by the TNRCC Recycling Market Development Program. For more information about items in this newsletter, contact the Market Development Team at 512/239-6750, Fax 512/239-6763, or at ccollins@tnrcc.state.tx.us.

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Market News Subscription Information

The most valuable tool for market development is good information. It's also the most cost effective. The TNRCC's Recycling Market Development Program publishes Market News, a free monthly newsletter dedicated to bringing you the latest and best information available on markets for recovered materials.

Each month, Market News features articles about specific materials, highlighting individual market success stories and keeping you abreast of market trends. The Recycling Market Development staff want this publication to be truly useful, so don't hesitate to call them at 512/239-6750 with your suggestions and items of interest.

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